

LAB3

ECE444/544



Introduction

In ECE444/544 lab 3, it's intended to let students learn the ladder topology.

And to inform students the quality of service.

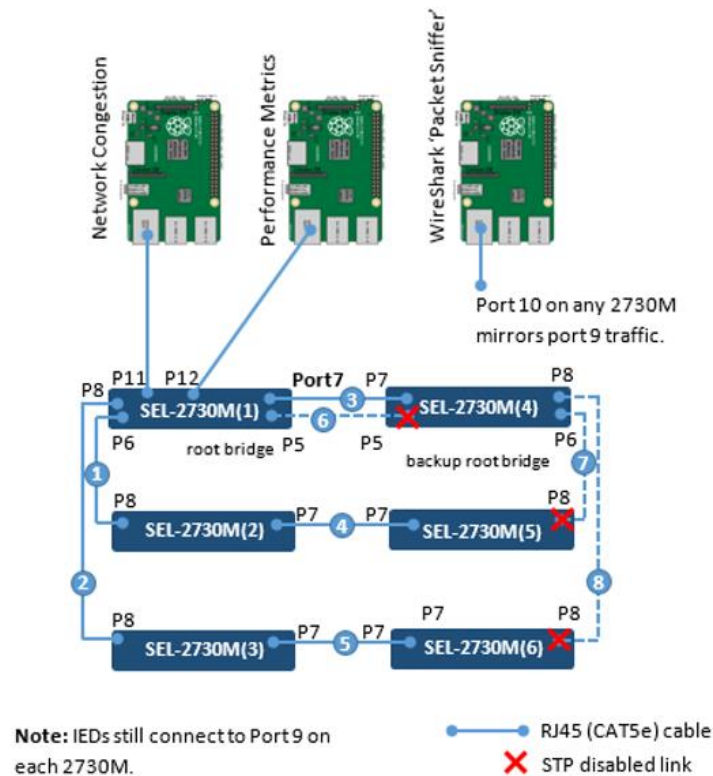


Figure 1: Physical Connection of Ladder Topology

In mininet, we follow the scheme above to draw the layout.

Procedure

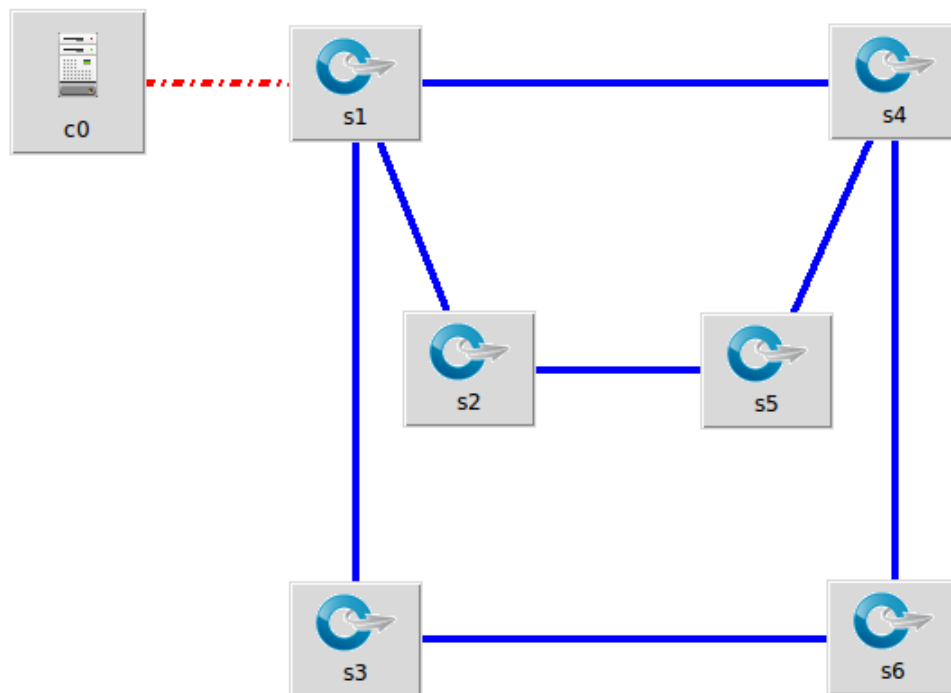
Draw the layout and run it.

You can set up the data as I used to do in lab 0.

For this time, there is no need to run the ryu. Because no host exists.

Then we run it and check the network traffic in wireshark.

Here is the result.

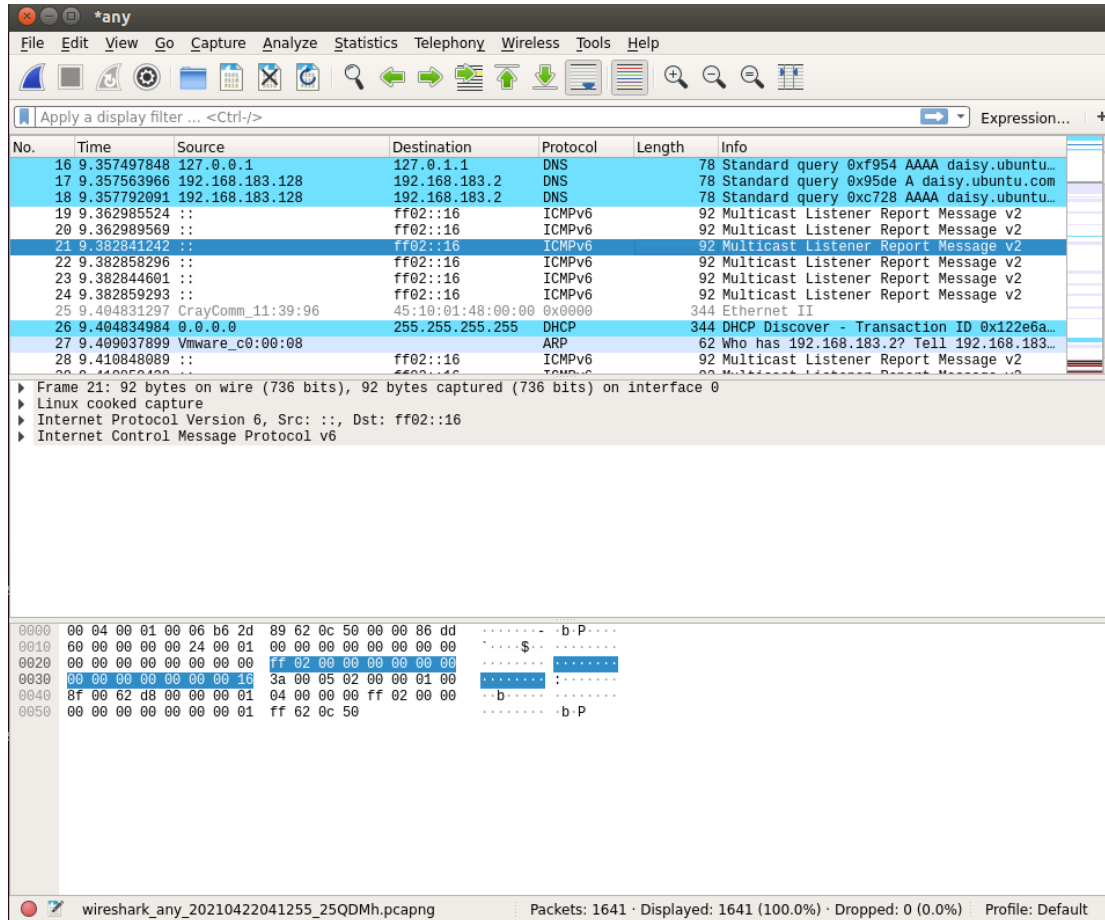


```

root@ubuntu: /home/ubuntu/mininet
root@ubuntu:/home/ubuntu/mininet# python lab3.py
*** Adding controller
*** Add switches
*** Add hosts
*** Add links
*** Starting network
*** Configuring hosts

*** Starting controllers
*** Starting switches
*** Post configure switches and hosts
*** Starting CLI:
mininet> nodes
available nodes are:
c0 s1 s2 s3 s4 s5 s6
mininet> net
s6 lo: s6-eth1:s4-eth2 s6-eth2:s3-eth2
s3 lo: s3-eth1:s1-eth2 s3-eth2:s6-eth2
s1 lo: s1-eth1:s2-eth1 s1-eth2:s3-eth1 s1-eth3:s4-eth1
s2 lo: s2-eth1:s1-eth1 s2-eth2:s5-eth1
s5 lo: s5-eth1:s2-eth2 s5-eth2:s4-eth3
s4 lo: s4-eth1:s1-eth3 s4-eth2:s6-eth1 s4-eth3:s5-eth2
c0
mininet>

```



Summary

- I don't think mininet shows the principle of the ladder topology.
- The data in wireshark is unknown to me. You are in the ECE444/544 course. So, you might understand these.
- I strongly recommend you to do the network topology labs in the UI lab instead of operating the mininet only.